

Title (en)

TIRE METALLIC CABLE ANOMALY DETECTION METHOD AND APPARATUS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERKENNUNG VON ANOMALIEN IN REIFENMETALLDRÄHTEN

Title (fr)

PROCÉDÉ ET APPAREIL DE DÉTECTION D'ANOMALIES DANS DES CÂBLES MÉTALLIQUES DE PNEU

Publication

EP 2417433 A1 20120215 (EN)

Application

EP 10762216 A 20100331

Priority

- US 2010029390 W 20100331
- US 2009040017 W 20090409

Abstract (en)

[origin: WO2010117363A1] Disclosed is an apparatus and methodology for detecting anomalies in cables within a tire structure. One or more pairs of magnetic field sensitive sensors are aligned within a magnetic field provided by a magnet. The alignment of sensors and magnet is such that flux lines from the magnet are generally parallel to the plane occupied by the magnetic sensors. A tire cable anomaly present between the magnetic field sensitive sensors produces a detectable difference in signals produced by the magnetic field sensitive sensors as a result of the formation of perpendicular flux patterns produced by the anomaly. A signal processing circuit receiving input signals from the sensors evaluates differences between the signals and produces an output signal upon the differences meeting selected criteria. The output signal may include an externally measurable signal and/or may include a visual signal indicating presence of a tire anomaly.

IPC 8 full level

G01M 17/02 (2006.01); **G01N 27/82** (2006.01)

CPC (source: EP US)

G01N 27/82 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010117363 A1 20101014; AU 2010234750 A1 20111103; AU 2010234750 B2 20130221; BR PI1014969 A2 20160426; BR PI1014969 A8 20171024; BR PI1014969 A8 20180102; CA 2757294 A1 20101014; CA 2757294 C 20140408; CN 102439411 A 20120502; CN 102439411 B 20150819; EP 2417433 A1 20120215; EP 2417433 A4 20150520; EP 2417433 B1 20181024; JP 2012523566 A 20121004; JP 5547801 B2 20140716; MX 2011010520 A 20111028; US 2012038357 A1 20120216; US 9442093 B2 20160913; WO 2010117855 A1 20101014

DOCDB simple family (application)

US 2009040017 W 20090409; AU 2010234750 A 20100331; BR PI1014969 A 20100331; CA 2757294 A 20100331; CN 201080022614 A 20100331; EP 10762216 A 20100331; JP 2012504711 A 20100331; MX 2011010520 A 20100331; US 2010029390 W 20100331; US 201013260744 A 20100331